## **ARMY PROGRAMS**

# Joint Simulation System (JSIMS)

The Joint Simulation System (JSIMS) is a single, distributed, and seamlessly integrated simulation environment that permits integration of real-world and simulated assets of the United States military Services and their allies on a virtual battlefield. The JSIMS virtual battlefield is simulated by a high-level architecture-compliant federation of component models. The component models include the National Air and Space Model, Warfighters' Simulation (WARSIM), WARSIM Intelligence Model, JSIMS Maritime, the Defense Intelligence Agency's Deployable Intelligence Simulation for Collaborative Operations, Joint Signals Intelligence Simulation, and National Simulation. JSIMS will provide a real-time simulation capability that can be configured for use in exercises of differing duration, scenarios, and complexities. It interfaces with real-world command, control, communications, computers, and intelligence (C4I) systems, providing a training environment that is transparent to the training audience. JSIMS will include scenarios that reflect the transition of military forces into less conventional roles such as multi-national peacekeeping and humanitarian assistance. At initial operational capability, JSIMS will provide an accredited simulation environment to support joint training for unified combatant command staffs, joint task force commanders and staffs, and joint task force component commanders and staffs. At full operational capability, JSIMS will evolve to support professional military and senior officer education, mission planning, mission rehearsal, and doctrine development.

#### **TEST & EVALUATION ACTIVITY**

In October 2002, the Joint Warfighting Center (JWFC) conducted System Functional Assessment 2 in Suffolk, Virginia – the second in a planned series of user evaluations of interim product deliveries from the JSIMS Program Office. In December 2002, the JSIMS program conducted the systems test, the developmental test preceding release of JSIMS Version 1.0 to the JWFC, in the JSIMS Integration Facility in Orlando, Florida.

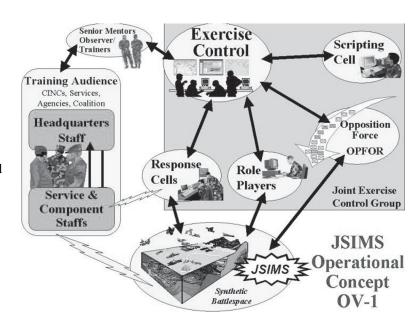
Shortly after the completion of the system test, the Deputy Secretary of Defense issued a Program Decision Memorandum in December 2002 that terminated JSIMS development at the end of FY03.

In March 2003, the JWFC conducted System Function Assessment 3 of JSIMS Version 1.0 at the JWFC. The United States Joint Forces Command (USJFCOM) chaired a flag officer review of the validation results in April 2003.

From April through May 2003, the JWFC continued domain-specific validation testing of JSIMS Version 1.0.1, the first maintenance update to JSIMS Version 1.0, at the JWFC.

The JSIMS program delivered JSIMS Version 1.0.2, the new record maintenance update, in May, but the JWFC did not resume validation testing, as the product was still incomplete. The JSIMS program delivered JSIMS Version 1.0.3, the third maintenance update in July, and the JWFC resumed validation testing in September.

The JSIMS program office conducted its final verification test in September 2003 at its integration facilities in Orlando, Florida.



As the result of formal program termination, an initial operational test of Joint Simulation System has been indefinitely postponed and it has been removed from the OSD test and evaluation oversight list.

## **ARMY PROGRAMS**

### **TEST & EVALUATION ASSESSMENT**

The developmental and user tests have demonstrated that JSIMS Version 1 consistently has problems with setup at user sites, initialization of a federation of component models, stability of operations, running at the required rate of real time even with small scenarios, interfacing with C4I systems, and incomplete and error-prone functionality. All of these difficulties justified suspension of validation testing at the JWFC after the USJFCOM review in April 2003.

The scheduled events continued to slip. In accordance with the Program Decision Memorandum, user validation was to be complete by the end of FY03. Due to the immaturity of the software, validation has now been extended into 1QFY04. USJFCOM has suspended planned use of JSIMS in support of joint task force training exercises until the software can meet the required standards.

The Program Decision Memorandum directed an Analysis of Alternatives (AoA) be conducted in FY04 to determine options for Joint Task Force Commander Training. DOT&E will support the AoA as needed. As the result of formal program termination, an initial operational test of JSIMS has been indefinitely postponed and it has been removed from the OSD test and evaluation oversight list.

On October 1, 2003, the JSIMS Program Office was closed and the JWFC took responsibility for JSIMS. The Program Decision Memorandum provides limited funding to maintain the existing software and to fix known problems. At this point, no new development on JSIMS is expected.